TITLE: A STUDY ON RETROPUPILLARY IMPLANTATION OF IRIS CLAW INTRAOCULAR LENS

ABSTRACT

PURPOSE: To evaluate the safety, technique and efficacy of retro pupillary implantation of iris claw intraocular lens in aphakia with inadequate capsular support. **MATERIALS AND METHODS:** In this prospective interventional study, 50 patients with postsurgical aphakia, post traumatic cataract, post traumatic zonular dialysis, post traumatic anterior/posterior subluxation or dislocation of lens and patients with endothelial cell count >1200cells/cu.mm were included. Complete preoperative ophthalmic evaluation was made. Anterior vitrectomy with retropupillary implantation of iris claw intraocular lens was done with excel optics posterior iris claw lens. Postoperatively the patients were treated with 1%prednisolone acetate and 0.5%moxifloxacin eye drops tapered over six weeks. Follow up was done at first, fourth and sixth week and late follow up was done at 6 and 12 months. During follow-up complications if any treated, retinoscopic refraction was done and best glasses prescribed. Success rate of surgery was defined as vision≥6/12.**RESULTS:** The mean age of presentation is 50.6yrs. 72% of patients were males and 28%were females.72% of patients were in post-surgical aphakia group and majority of patients (62%) underwent SICS. The most common mode of injury in post trauma patients was blunt trauma(22%).Majority of the patients(68%) presented within 2-4 months duration.76% of patients were operated within 30mts.The most common postoperative complication which significantly affected visual outcome was iritis (28%)with p value0.001 followed by striate keratopathy(18%)with p value 0.015 which were statistically significant. Visual outcome after 6 weeks of surgery was ≥6/12 in 41patients.The statistically significant factors associated with poor visual outcome are preoperative factors like chronic uveitis and trauma and postoperative factors like iritis and striate keratopathy. The success rate of surgery was 82%.The postoperative refraction was more towards myopic side in our study. **CONCLUSION:** To conclude retro pupillary implantation of iris claw lens is safe, technically simpler, require less surgical duration, intraoperative and postoperative complications are less compared to other secondary IOLs and have a higher success rate in terms of visual outcome.

KEYWORDS: surgical aphakia, traumatic cataract, retro pupillary iris claw lens.